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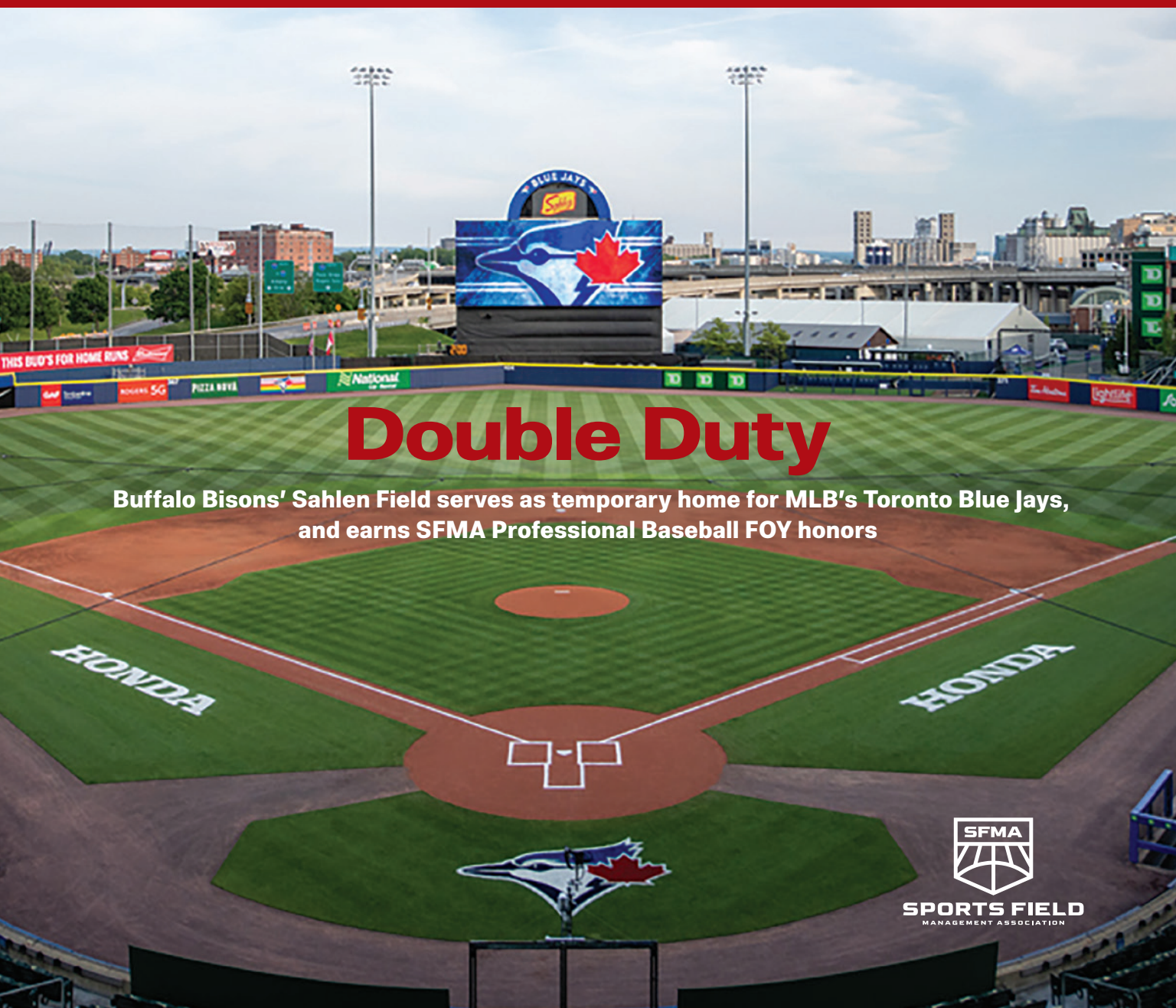
SportsField MANAGEMENT

March 2022 | Vol. 38 No. 3 | The Official Publication of the Sports Field Management Association



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Editor's Note

John Kmitta
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SFMA. What an exciting time for the association and the industry. I'm thrilled, because, two years after the rebrand of this magazine, the official publication finally has a direct tie to the new association moniker.

And for the association to be able to announce the rebrand at an in-person conference is even more special. I know I wrote briefly about the conference and the rebrand in last month's Editor's Note, but there was so much more to this year's event, including the Volunteer Field Rebuild, Seminar on Wheels, the SFMA Awards, the conference education, and amazing networking opportunities. Which is why this issue of *SportsField Management* features our post-show recap, including plenty of photos from this year's event (see coverage beginning on page 20). We also delve more deeply into the association rebrand with insight from SFMA leaders (see page 18).

I enjoyed the ability to meet so many of you in person for the first time, to see the latest industry innovations on the trade show floor, to be able to sit in on amazing education sessions, and to witness the emotion of the awards presentations during the banquet.

But what stood out most to me at the conference was the turfgrass management students who were in attendance. Whether it was the students from the Brentsville District High School program who painted the new SFMA logo on the front lawn of the convention center, or all the college/university students from 2- and 4-year programs who participated in the SFMA Student Challenge, I couldn't have come away more impressed.

In my conversations with some of the students, their maturity and excitement for sports field management was readily apparent. Kudos to all the students who represented themselves and their schools so well – the future of this industry is very bright. **SFM**

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EPG BRAND ACCELERATION

President's Message

James Bergdoll, CSFM, CPRP
SFMA President
jbergdoll@chattanooga.gov

Greetings fellow sports field management professionals! That dang groundhog saw his shadow again this year, which means six more weeks of winter. It's a silly tradition that doesn't mean anything, because sports and the need for sports field management continue regardless of the weather. Hats off to all of you who had to maintain safe surfaces throughout the winter, and best wishes to everyone who is preparing for spring activities! It will be nice to see things start to green up again no doubt.

One other thing we can count on each January is our annual conference and exhibition (except 2021). Wow, what an amazing event; and how about Savannah as a host – such a cool town. This year was certainly a special one, having not gotten together since 2020 in West Palm Beach, Fla. The participation was better than expected, too. Overall, we had close to 1,700 attendees, compared to 2,100 in 2020. We had budgeted for 40% less attendance, and came out at roughly 19% less, which was fantastic! It seemed like everyone was really excited about coming together again to share ideas, see new equipment, connect with new people and see old friends.

What made this year really special was the announcement of the rebrand of our association, the SFMA. Congratulations to all involved to make the rebrand happen, as well as the launch at the opening general session. The drumline, the historical video and other graphics, along with the surprise visit from one of our founders, George Toma. Great job by Past President Nick McKenna, CSFM, for presenting this rebrand to us. Thank you, Nick, for your leadership through a momentous year with the rebrand and our 10-year strategic plan development. Also, how about a round of applause for our SFMA staff making this all happen; thank you CEO Kim, Leah, Nora, Kristen and Whitney. Also, a big thank you to David Rosenberg and M&E staff for another great trade show!

I also want to thank everyone who participated in the Project Evergreen field rebuild this year. Roughly 50 volunteers gathered to pull off a complete field renovation for Mother Mathilda Beasley Park. This has become my favorite event at the conference. We could not have done all of this work in one afternoon without all involved. Special thanks to Scott Bills, CSFM; Cindy Code, CEO of Project Evergreen; all of the sponsors and suppliers who provided materials, equipment and time. And a big thanks to everyone who came out and got dirty that day. I know the community really appreciates your work.

I hope to see you all next year in Salt Lake City! **SFM**

James Bergdoll, CSFM, CPRP

Environmental Facility Certification Program Expands

Version 3 is now the standard

The SFMA Environmental Facility Certification Program added two assessment areas to its new version 3. Managed Landscape and Open Areas and Synthetic Surfaces are now part of the assessment instrument.

Sixteen questions cover management practices in landscaped and open areas. These include mowing, water management, pesticide use, pollinators, nesting opportunities, native plantings, signage and more.

The new Synthetic Surfaces section is to only be used for a synthetic surface within a complex that is primarily natural grass fields. A synthetic complex does not qualify for assessment. Areas covered include construction, drainage, heat monitoring, sanitation, grooming, disposal and more.

These two new sections join the 10 existing assessment areas:

- Stormwater Management
- Fertilization
- Pesticides/Integrated Pest Management
- Recycling
- Composting
- Mowing
- Energy Conservation
- Shop Buildings and Storage Areas
- Irrigation, Water Quality and Water Conservation
- Educational Outreach Program

Attaining an 80 percent rating on each of the 12 sections is required for the self-assessment phase of this program to move to the next phase, which is attesting. After achieving the required 80 percent on the assessment sections, the facility manager engages an attester, who must be a certified sports field manager (CSFM). The attester walks through the facility with the field manager to validate that the environmental practices that are in the assessment are in place or are being addressed.

When the attesting phase is complete and validated, environmental facility certification is awarded for three years, and a plaque recognizing the honor may be purchased.

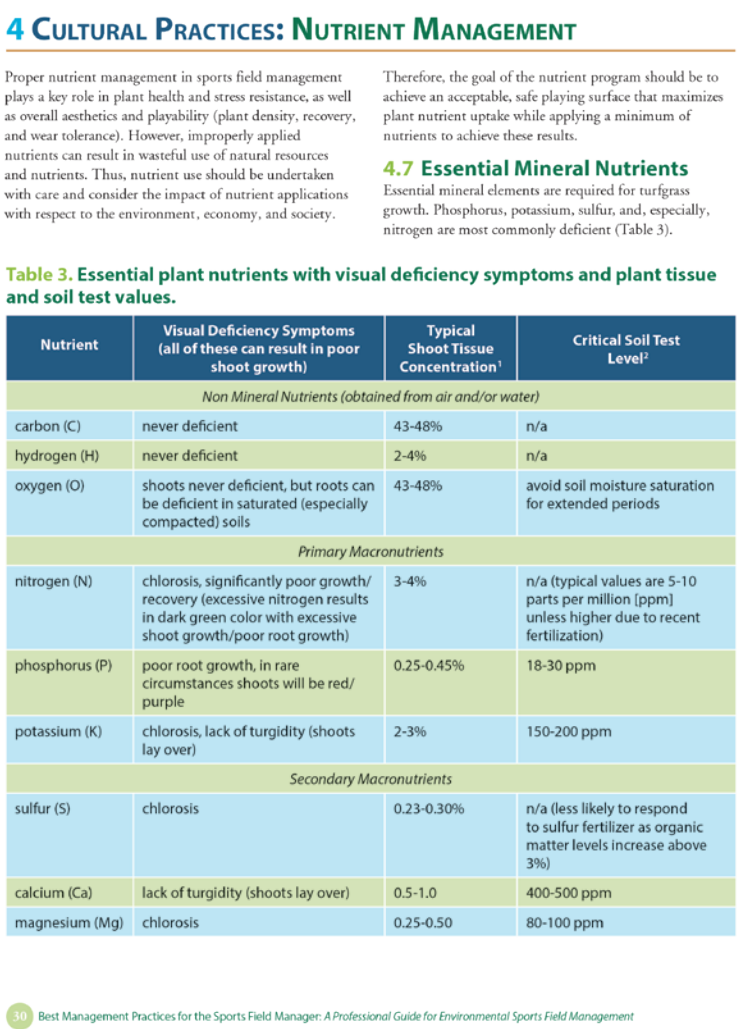
A new logo recognizing this achievement has been developed as part of SFMA's rebrand, which was unveiled at the annual conference in January.

Best Management Practices Offer Many Uses

In 2021, SFMA released to the industry its "Best Management Practices for the Sports Field Manager: A Professional Guide for Sports Field Management." The guide is a comprehensive compilation of 12 topic areas developed by subject matter experts. More than 20 academics, environmentalists and practitioners collaborated on the 18-month project.

The guide is free to any individual or group who wants to use it. Sections include:

- Planning, Design, and Construction
- Turfgrass Establishment
- Cultural Practices: Mowing
- Cultural Practices: Nutrient Management
- Cultural Practices: Irrigation
- Cultural Practices: Cultivation and Surface Management
- Cultural Practices: Integrated Pest Management
- Pesticide Management
- Sustainable Landscaping



4 Cultural Practices: Nutrient Management

Proper nutrient management in sports field management plays a key role in plant health and stress resistance, as well as overall aesthetics and playability (plant density, recovery, and wear tolerance). However, improperly applied nutrients can result in wasteful use of natural resources and nutrients. Thus, nutrient use should be undertaken with care and consider the impact of nutrient applications with respect to the environment, economy, and society. Therefore, the goal of the nutrient program should be to achieve an acceptable, safe playing surface that maximizes plant nutrient uptake while applying a minimum of nutrients to achieve these results.

4.7 Essential Mineral Nutrients

Essential mineral elements are required for turfgrass growth. Phosphorus, potassium, sulfur, and, especially, nitrogen are most commonly deficient (Table 3).

Table 3. Essential plant nutrients with visual deficiency symptoms and plant tissue and soil test values.

Nutrient	Visual Deficiency Symptoms (all of these can result in poor shoot growth)	Typical Shoot Tissue Concentration[1]	Critical Soil Test Level[2]
Non Mineral Nutrients (obtained from air and/or water)			
carbon (C)	never deficient	43-48%	n/a
hydrogen (H)	never deficient	2-4%	n/a
oxygen (O)	shoots never deficient, but roots can be deficient in saturated (especially compacted) soils	43-48%	avoid soil moisture saturation for extended periods
Primary Macronutrients			
nitrogen (N)	chlorosis, significantly poor growth/ recovery (excessive nitrogen results in dark green color with excessive shoot growth/poor root growth)	3-4%	n/a (typical values are 5-10 parts per million [ppm] unless higher due to recent fertilization)
phosphorus (P)	poor root growth, in rare circumstances shoots will be red/ purple	0.25-0.45%	18-30 ppm
potassium (K)	chlorosis, lack of turgidity (shoots lay over)	2-3%	150-200 ppm
Secondary Macronutrients			
sulfur (S)	chlorosis	0.23-0.30%	n/a (less likely to respond to sulfur fertilizer as organic matter levels increase above 3%)
calcium (Ca)	lack of turgidity (shoots lay over)	0.5-1.0	400-500 ppm
magnesium (Mg)	chlorosis	0.25-0.50	80-100 ppm

30 Best Management Practices for the Sports Field Manager: *A Professional Guide for Environmental Sports Field Management*

- Synthetic Turf
- Maintenance Operations
- Emergency Preparedness

Uses of the BMPs vary. Some in the industry are using the document to provide verified information to their administration and to their constituents on why they are doing certain practices. The guide is helping to educate employers on the need for environmental stewardship and the value of a sports field manager. Others use it to validate why their facility needs to invest in better field management resources, such as supplies and equipment. It is also being used as a staff training tool so that the crew better understands why they do certain tasks, and to also educate other departments on sports field management. Commercial members have found it useful to help educate customers on environmental best practices.

Using it as the core platform of their government relations program, the Mid Atlantic chapter of the SFMA (MASTMA) developed a version that is customized to its region. It has helped MASTMA, together with its government relations firm, to educate legislators about the work of sports field professionals and protect the sports field management industry from unnecessary legislative barriers. MASTMA has held workshops to educate its chapter members on how to effectively use its guide. Some chapters have engaged academics to teach their content at workshops and academics have also used it in the classroom as part of their curriculum.

SFMA has two versions: one is a national document covering federal standards and best management practices. The second is a customizable Word template for chapters and other organizations to use to advance their government relations efforts. That version can be edited to fit the needs for a specific region, state or facility. Customization of this version of the document is allowed, but certain areas have been locked to maintain the integrity of the information. Both versions are copyright free and available at no charge.

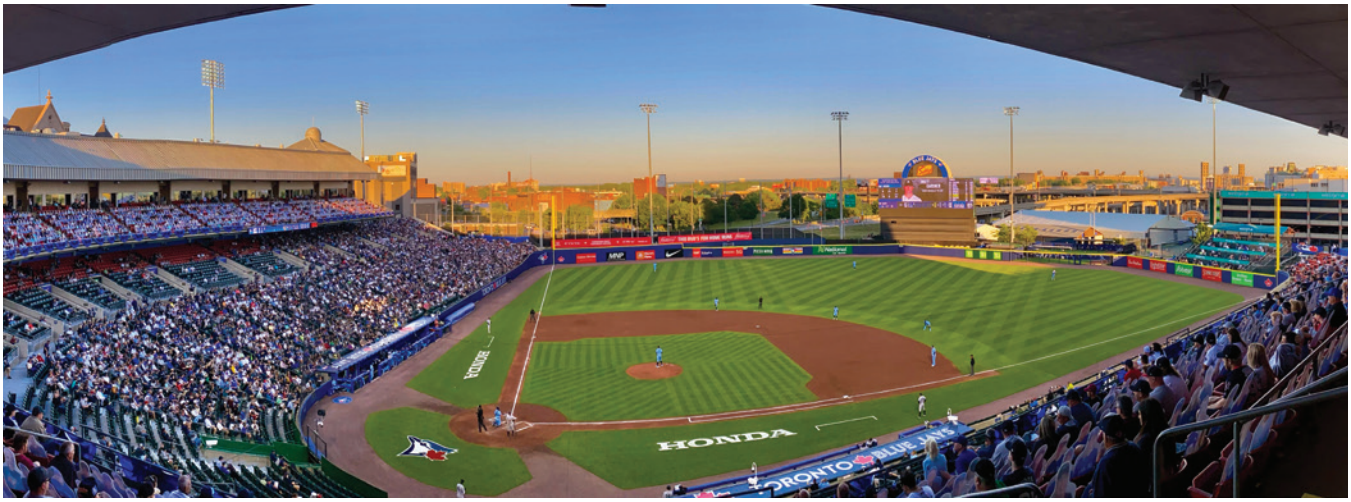
The BMPs also include a How-to-Use Guide. Both versions and the use guide are available online and can be found at *sportsfieldmanagement.org*, under the "Environmental" section of the "Institute" tab. The guide has had more than 6,000 page views, and the importance of using it was presented at a well-attended session at the recent SFMA national conference in January.

The New England Chapter of SFMA (NESTMA) is just starting its journey to customize the guide for use by its chapter members and to validate to legislators the environmental stewardship of New England sports field managers. SFM

SAHLEN FIELD

BUFFALO, N.Y.

The Field of the Year Awards program is made possible by the support of sponsors Carolina Green Corp., Precision Laboratories, and John Deere.



The 2021 season at Sahlen Field had two drastically different seasons play there this year. I started with the Buffalo Bisons on March 15 knowing that our parent club, the Toronto Blue Jays, were going to call our ballpark home at some point this year. We didn't know if it was going to be in May or June. We had to be ready for Major League Baseball because of the border closure due to the COVID-19 pandemic.

On my second day of work with the Bisons, I was informed that the grounds maintenance shop was going to be torn down and in its place was going to be a new indoor batting cage building. This decision was made before I was hired, but I knew it was coming. The shop was cleared and emptied in three days and a semi-temporary home was found underneath a former picnic pavilion behind the center field scoreboard, and my office was placed in an unused concession stand. The pavilion walls were thin vinyl walls, ala shower curtains, that opened and closed the same way. From the time I started in March to late May, the stadium was filled with cement trucks and construction workers to build a new clubhouse, new off-the-field bullpens, new LED field lighting, the new batting cage building and construct a semi-permanent visiting clubhouse.

With the arrival of the Blue Jays playing home games, also came their grounds crew to help facilitate the needs and wants of the team for the playing surface. Tom Farrell, the Blue Jays' director of field operations, and his staff, along with myself and the Bisons grounds staff, played a vital role in removing the on-field bullpens, building the new bullpens and the overall preparations with for the new improvements for the playing surface.

On April 14, the Blue Jays decided to replace the outfield with new sod from Tuckahoe, because the outfield was contaminated with *Poa Annua* and was having some drainage issues with the build-up of a 3- to 4-inch organic layer. The outfield replacement started on May 6 and finished on May 10. The Blue Jays played their first "home" game in Buffalo on June 1 after starting the 2021 season at their spring training complex in Dunedin, Fla.

Tom and I acted as co-head groundskeepers for Sahlen Field. The Bisons grounds staff was adopted into the Blue Jays grounds staff, and we worked as a complete unit on game days while they were in Buffalo. Tom managed his staff and communication with the Blue Jays, and I oversaw all the cultural practices and managed my staff. The cultural practice and agronomic plans were performed every time the team went out of town. Fertilizer was applied once a week at low rates – our goal being around .60-.75 pounds of nitrogen per month. Aerating and topdressing were performed, along with resodding of high-traffic areas and making irrigation repairs as necessary.

The Blue Jays played their final home game in Buffalo on July 21. After the Blue Jays departed, the first Buffalo Bisons home game was scheduled for August 10. The stadium had to undergo some minor renovations when the Blue Jays left to improve the visiting clubhouse. In that time, we had vandals break into the stadium and drive a forklift on the field, causing $8,000 worth of damage. The field was repaired in time for the Bisons' home opener on August 10. The Bisons played 23 home games at Sahlen Field (the last being on September 26). Overall, the 2021 season at Sahlen Field saw two different grounds crews manicure the field with two different teams calling it home – all with the uncertainty of the COVID-19 pandemic still paying a role.

– Kelly Rensel, CSFM, head groundskeeper

SportsField Management (SFM): Congratulations on the winning field. What are you most proud of with this win, and what stands out most about the winning field?

Kelly Rensel: I'm incredibly proud of my crew! We had two different seasons in one year. The new guys got a chance to work with and learn from the Blue Jays' ground staff when they were here, and the returning guys got to lead and take on more responsibility. The thing that stands out about winning is that we had to handle so much adversity. We had to comply with ever-changing COVID protocols, we were always week-to-week with how long the Blue Jays were staying in Buffalo, and then to have the Bisons come back home and finish off another schedule.

SFM: What attracted you to a career in sports field management, and

Level and category of submission: Professional Baseball

Field manager: Kelly Rensel, CSFM

Title: Head groundskeeper

Education: Bachelor's degree in Sports Administration

Experience: (2008) intern with Mahoning Valley Scrappers, (2009) head groundskeeper with Idaho Falls Chukars, (2010-2013) head groundskeeper with Huntsville Stars, (2014-2015) head groundskeeper with Greeneville Astros, (2016-2020) head groundskeeper with Great Lakes Loons, and (2021-present) head groundskeeper with Buffalo Bisons.

Full-time staff: Nate Rivera

Students/interns, part-time and seasonal staff: Joe Mogavero, Nick Dils, Jake Zwirecki, Jake Ring, Dan Smolka, Adam Noyes, Adam Smolka, Tom Farrell, Ben Jamieson and Brett Gossell.

Original construction: 1986

Turfgrass: Kentucky bluegrass (40% P105, 30% Midnight Star, 30% Brilliant)

Rootzone: Sandy loam

Drainage system: Herringbone

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what has been your career path through the industry?

Rensel: I kind of fell into it. I majored in Sport Administration, and always wanted to work in baseball. Long story short, I chose to do a stadium ops/grounds internship with the Mahoning Valley Scrappers in 2008, and loved every minute of it. From there, in 2009, I was hired as the head groundskeeper for the Idaho Falls Chukars, and was the head groundskeeper for the Huntsville Stars from 2010-2013. From 2014 through 2015 I was the head groundskeeper for the Greeneville Astros, and from 2016-2020 I was the head groundskeeper for the Great Lakes Loons. Now I am the head groundskeeper for the Buffalo Bisons, and started here in March of 2021. My career path has been crazy! I wanted to learn as much as I could, so moving around and getting hands-on experience with different turfgrasses in different climates was something I wanted to do.

SFM: Who are your mentors in the industry, and/or what is the best piece of advice you have received?

Rensel: Bill Marbet is someone who has greatly impacted my career. I got to work for Bill when I was in Greeneville. He's a great mind in the sports turf industry, and an even better person. I couldn't be any more

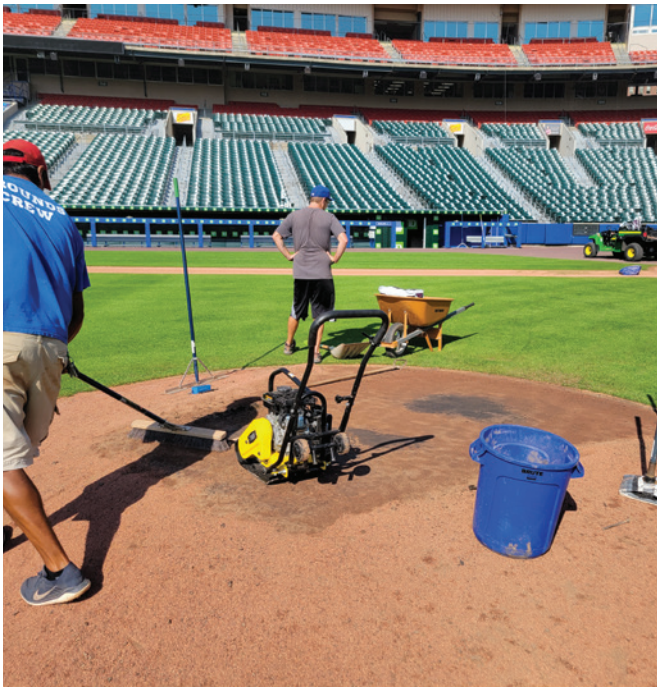
Judge's Comments

Kelly and his team in Buffalo dealt with the pandemic in a way that most of us did not have to. Having to host not only his home team Bisons but also The Toronto Blue Jays, their work was cut out for them. Kelly's poise, leadership, and agronomic acumen led to producing a world-class surface at Sahlen Field for all to see and play on. All of this, in the judges' eyes, made it easy to award Sahlen Field the Field of the Year.

– Trevor Odders, CSFM

Editor's Note: *A panel of judges independently scored Field of the Year entries based on playability, appearance of surfaces, utilization of innovative solutions, effective use of budget and implementation of a comprehensive agronomic program.*

thankful to work for him. One of the biggest things I learned earlier on was I couldn't make the new job like the last one. The field, stadium, equipment, weather, grass type, front office and schedules are all different. You can't do the same things in every situation. You can take the same skills and routines that you have learned. The new job isn't going to be a copy of the old, you must be adaptable to something new.



SFM: What are the biggest challenges you have faced with the winning field, and how have you approached those challenges?

Rensel: One of the biggest challenges that I faced was, when I started, getting used to the Bisons front office and how they do things; and then, with the Blue Jays (our parent club) calling Sahlen Field home temporarily, making sure their needs and wants are met. In the process of meeting the Blue Jays' needs and Major League Baseball's

requirements, we lost our grounds shop in the process. Our equipment and supplies were stored underneath the center field picnic pavilion, and my office was moved to an unused concession stand. Working out of a wooden structure isn't the most comfortable, but we had to adapt. The most obvious challenge was working with all the COVID protocols and restrictions. Also, we never fully knew how long the Blue Jays were going to stay in Buffalo or when the Canadian government was going to open the border and allow them to go back. All the plans we made were usually week to week with numerous back-up plans being made. Keeping our schedules flexible was the key to success this past year. With all the construction and renovation we had to stay up to date with the contractors on their timelines so we could coordinate with our tasks for the field. Emails, texts or quick face-to-face meetings were key to communication with everybody.

SFM: What's the greatest pleasure you derive from your job?

Rensel: I get to do something that I'm passionate about. I love coming to the ballpark every day. I love being on the mower, drinking coffee on the morning of a game. I love frantically showing the umpires radar in between innings. Also, having an impact on some of the younger sports field managers in the industry is very rewarding. Seeing guys who have worked as interns or assistants of mine advance, or just gameday staff that come back year after year, is incredibly motivating.

SFM: How has your career benefited from being a member of SFMA?

Rensel: My career has greatly benefitted from being a member of the SFMA. I've been a member since 2009, and I know I wouldn't have the education and the networking opportunities that I have now without it. Now I'm a Certified Sports Field Manager (CSFM), it has made me take a step up and be a leader in the industry. **SFM**

CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

PROBLEM:
Depressions on field in end zone area

TURFGRASS AREA:
High school football field

LOCATION:
South Portland, Maine

TURFGRASS VARIETY:
Bluegrass / ryegrass

Answer on page 33

John Mascaro is president of Turf-Tec International

Inside the Association Rebrand

By John Kmitta

As mentioned in the February issue of *SportsField Management*, the STMA announced its association rebrand to the Sports Field Management Association (SFMA) during a reveal ceremony at the association's annual conference in Savannah, Ga. According to SFMA, the rebrand broadens the association's scope to all who have job responsibilities on a field or within the industry.

"The rebrand of the association was a culmination of things that have happened over the last few years," said SFMA President James Bergdoll, CSFM. "The industry has expanded and evolved, and there was a desire to change to stay relevant."

Said SFMA Past President Nick McKenna, CSFM, "As a board of directors, we wanted to make sure we were representing our members, chapters, and our industry as best as possible, so that's where we began by polling our membership and having conversations about a potential name changes with our peer organizations and chapters. Once we determined that there was not strong opposition to a potential name change, we continued to have further conversations. Originally, we were just considering a name change; but as we got into the development process for our 10-year strategic plan, it became apparent that that timing and opportunity were right for a complete rebranding of the association."

According to McKenna, the association's new logo illustrates SFMA's forward-thinking approach with vibrant colors and a modernized image designed to capture the essence of a field from a variety of sports. The tagline "Where the game begins," captures the importance of what SFMA members provide.

"Without a team of highly trained professionals to ensure sports fields are safe, healthy and aesthetically pleasing, the games we love to play and watch would not be what they are today," said McKenna. "Everything truly begins with the field."

Bergdoll added that inclusiveness was important with the new association brand, as many members felt the word "manager" was restrictive to those working at a higher level, while the term "management" encompasses everyone and the work being done at all levels.

"The expectations for sports fields and the people managing them will continue to grow and evolve, and we need to push that evolution and not be an afterthought," he said. "To me, the new name is just the start of this."

Added Bergdoll, "We, as an association, need to promote professionalism internally and externally. Part of that is referring to practitioners as sports field managers. It will take some time, but being intentional about the terminology we use to refer to ourselves is crucial in our promotion of professionals."

Said SFMA President-Elect Sun Roesslein, CSFM, "My official title is sports stadium manager, but I have called myself a sports field manager for a long time when I'm explaining to someone what it is I do. There are a plethora of different titles in our industry, and just as many different responsibilities and job descriptions. Scientifically, we are turfgrass managers, understanding the science of plant pathology to weed management.

"The professional expertise is displayed in how we manage every aspect of the surfaces, the actual fields sports are played on," Roesslein added. "That might include managing practice time, game schedules, equipment setup, events unrelated to sports like concerts, movie nights, camp outs or monster truck rallies that happen on the field and go beyond the scientific knowledge of turfgrass management. Understanding how to get those surfaces back to being a safe playing field for the athletes that the fields were initially built to serve is a large part of being a professional sports field manager. This wider picture of our member's field management expertise was important to include and try to emphasize in the new name of our association."

Added Bergdoll, "While natural grass, or turfgrass, is the preferred surface type by members, we also recognize our members are responsible for maintaining safe and playable fields of all surface types. Therefore, remov-

Photo provided by the Sports Field Management Association

ing the word 'turf' and using 'fields' captures all surfaces."

Also, according to SFMA, the term "turf" was confusing to many, who thus assumed the association was affiliated with, or tied to, synthetic surfaces.

"The word 'turf' has become synonymous with the synthetic field industry and, unfortunately, that's not a full representation of our association and its members," said McKenna.

Despite the move away from the term "turf," and advocating for properly built and maintained natural grass fields, Bergdoll pointed out that SFMA has a role in advocating for better education regarding synthetic turf maintenance and the development of safer synthetic surfaces.

"SFMA is dedicated to the safety of all playing surfaces, regardless of the type," said Bergdoll. "We recognize that while most of our membership prefers natural grass fields, we also know the market size of synthetic turf is far reaching. For many years, synthetic fields have been marketed and sold on not needing maintenance or are low maintenance; in reality, we know that is not true. They actually require a good bit of maintenance to remain safe for users. We have a good relationship with the Synthetic Turf Council, which has helped spread our message of the importance of maintenance of synthetic turf. Continuing to develop the education and offering to members and beyond is still important."

Said Roesslein, "As an association, a large part of our mission is to educate our members and give them the tools needed to advocate for the best playing surface for their particular situation. Then we provide the information needed to manage that playing surface with player safety and best management practices in the forefront of the maintenance plan."

According to Roesslein, the rebrand is a more accurate depiction of what SFMA members do.

"Sports fields can include natural grass, synthetic or hybrid surfaces, as well as a multitude of different sports played on them," she said. "Many of our members are managing facilities that host multiple sports, and they need to be informed about what each sport requires."

According to SFMA, looking ahead, many of the association's chapters are considering aligning their chapter's name with the SFMA brand to present a strong and unified industry.

"Ultimately the decision for chapters to rebrand and align with the national association is entirely up to them," said McKenna. "While we would love for our branding and messaging to align with all chapters across the country, there are a lot of factors that go into those decisions and, therefore, they must be made on a chapter-by-chapter basis by their leadership groups."

Added McKenna, "I believe this rebrand shows that, as an association, we are just like our members, adaptive and responsive. We are looking to the future and attempting to further build and grow the association along with industry as it grows and evolves."

Said Bergdoll, "With this rebrand, we look to become a stronger and more inclusive community that represents, and is an advocate for, all of those who make up SFMA." **SFM**

John Kmitta is associate publisher and editorial brand director of SportsField Management magazine.

Photo by John Kmitta

2022 SFMA Conference and Exhibition

January 17-20, 2022, Savannah, Ga.

The Sports Field Management Association (SFMA) Conferene and Exhibition, January 17-20, 2022, in Savannah, Ga., welcomed nearly 1,700 participants, including more than 1,000 sports field management industry leaders and more than 660 exhibitors to the Savannah Convention Center. Four days of industry education, networking events and product demonstrations were highlighted by a Volunteer Field Rebuild of Mother Mathilda Beasley Park; Seminar on Wheels tour to historic Grayson Stadium, home of the Savannah Bananas; and the association rebrand reveal from STMA to SFMA!

Attendees enjoyed education sessions and panels presented by renowned industry leaders. Sessions focused on turfgrass management, facility management, synthetic turf, pest control, water, industry developments, baseball and professional development.

Award winners

Founders' Awards

The prestigious Founders' Awards, acknowledging significant contributions to the profession, were bestowed to:

- Steve Bush CSFM, CFB, Bush Sports Turf (posthumously) – George Toma Golden Rake
- Joshua McPherson, CSFM, St. Louis FC– Dick Ericson Award
- Doug Schattinger, Pioneer Athletics – Harry C. Gill Award
- Dr. Nick Christians, Iowa State University – Dr. William H. Daniel Award

Field of the Year

Field of the Year recipients in professional, collegiate, schools and parks categories included the following:

- Professional Baseball – Sahlen Field, Buffalo Bisons (Buffalo, NY): Kelly Rensel, CSFM
- Professional Soccer – Red Bull Arena, New York Red Bulls, (Harrison, NJ): Neal Sitzman
- College and University Football – Moncrief Field at Amon Carter Stadium, Texas Christian University (Fort Worth, TX): Andrew Siegel
- College and University Soccer – Garvey-Rosenthal Soccer Field, Texas Christian University (Fort Worth, TX): Andrew Siegel
- College and University Baseball – Dudy Noble Field, Mississippi State University (Starkville, MS): Brandon Hardin
- College and University Softball – Rhoads Stadium, University of Alabama (Tuscaloosa, AL): Jon DeWitt, CSFM
- College and University Sporting Grounds – Dorrance Field, University of North Carolina (Chapel Hill, NC): Casey Carrick, CSFM
- Schools and Parks Baseball – Norbrock Stadium, City of Kamloops (Kamloops, Canada): Mike DeCicco and Shawn Cook

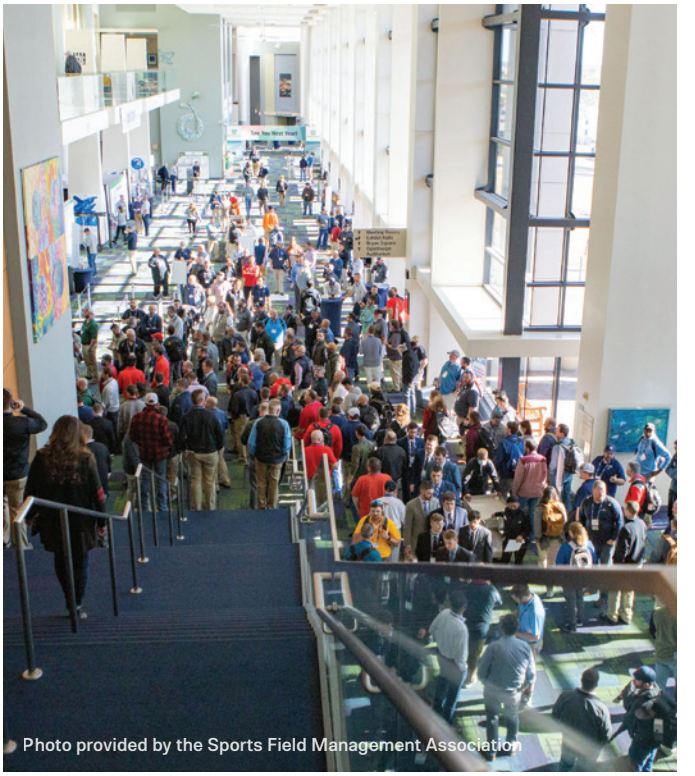


Photo provided by the Sports Field Management Association

Photo provided by the Sports Field Management Association

- Schools and Parks Soccer – Walsh Field, Pace Academy (Mableton, GA): Daniel Prince
- Schools and Parks Softball – Tournament Capital Ranch Slo-Pitch Field, City of Kamloops (Kamloops, Canada): Mike DeCicco and Shawn Cook
- Schools and Parks Sporting Grounds – Donald Lambert Field, Brentsville District High School (Nokesville, VA): Drew Miller, Turfgrass Management Students

President's Award for Leadership

The President's Award for Leadership was presented to Andrew Miller of the Brentsville Turfgrass Management Program in memory of Ryland Harris.

SFMA Student Challenge results

Congratulations to all SFMA Student Challenge participants for their exceptional performance on the 2022 exam! The Student Challenge is presented by SAFE, Founding Partner Hunter Industries, and supporting sponsor Ewing. Seven two-year teams and 15 four-year teams competed for $5,000 awards in each division.

Photo by Steve Trusty, Trusty & Associates

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SCAN ME

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Winning the 4-year competition was Purdue University Team 204 (William Myrehn, Kyle Kidwell, Will Hathaway, and Nicholas Oyler). Second place was Penn State University Team 301 (Cameron Foreman, Nate Moore, Kyle Masters, and Stephen Campbell). Third place was Penn State University Team 401 (Joshua Sheneman, Eli Thompson, Zack Newsome, and William Hilderhoff).

Winning the 2-year competition was Penn State University Team 101 (Ryan Trudeau, Payton Kvistad, Nicholas Sterlace, and James Marsh). Second place was Kirkwood Community College Team 202 (Zachary Meyer, Parker Bechen, Philip Holten, Lucas Tornow). Third place was Mt. San Antonio College Team 104 (Maria Rivas, Ortwin Trujillo, Eduardo Gutierrez, and Jose Valdes).

Photo provided by the Sports Field Management Association

CSFM Class of 2021

Those achieving Certified Sports Field Manager status in 2021 were as follows:

- Brian McDougal, CSFM, Port Huron Area School District
- Michael Long, CSFM, New Hanover County Parks and Gardens
- Zach Van Voorhees, CSFM, Town of Cary
- Jeremy Driscoll, CSFM, St. Mark's High School
- Andy Ommen, CSFM, McLean County PONY Baseball
- Jason Allen, CSFM, City of La Vista
- Thomas Barry, CSFM, Greens Farms Academy
- James Gore, CSFM, Championship Turf Services
- Larry DeVito, CSFM, Minnesota Twins, Target Field
- Michael McAfee, CSFM, Team Athletic Field Builders
- Caleb Clements, CSFM, Blue Valley Schools

Environmental Facility Certification

Those achieving SFMA's Environmental Facility Certification were as follows:

- Waukegan SportsPark, Noel Brusius, CSFM

2022 MiLB Groundskeeper's Symposium Recap

By Keith Winter

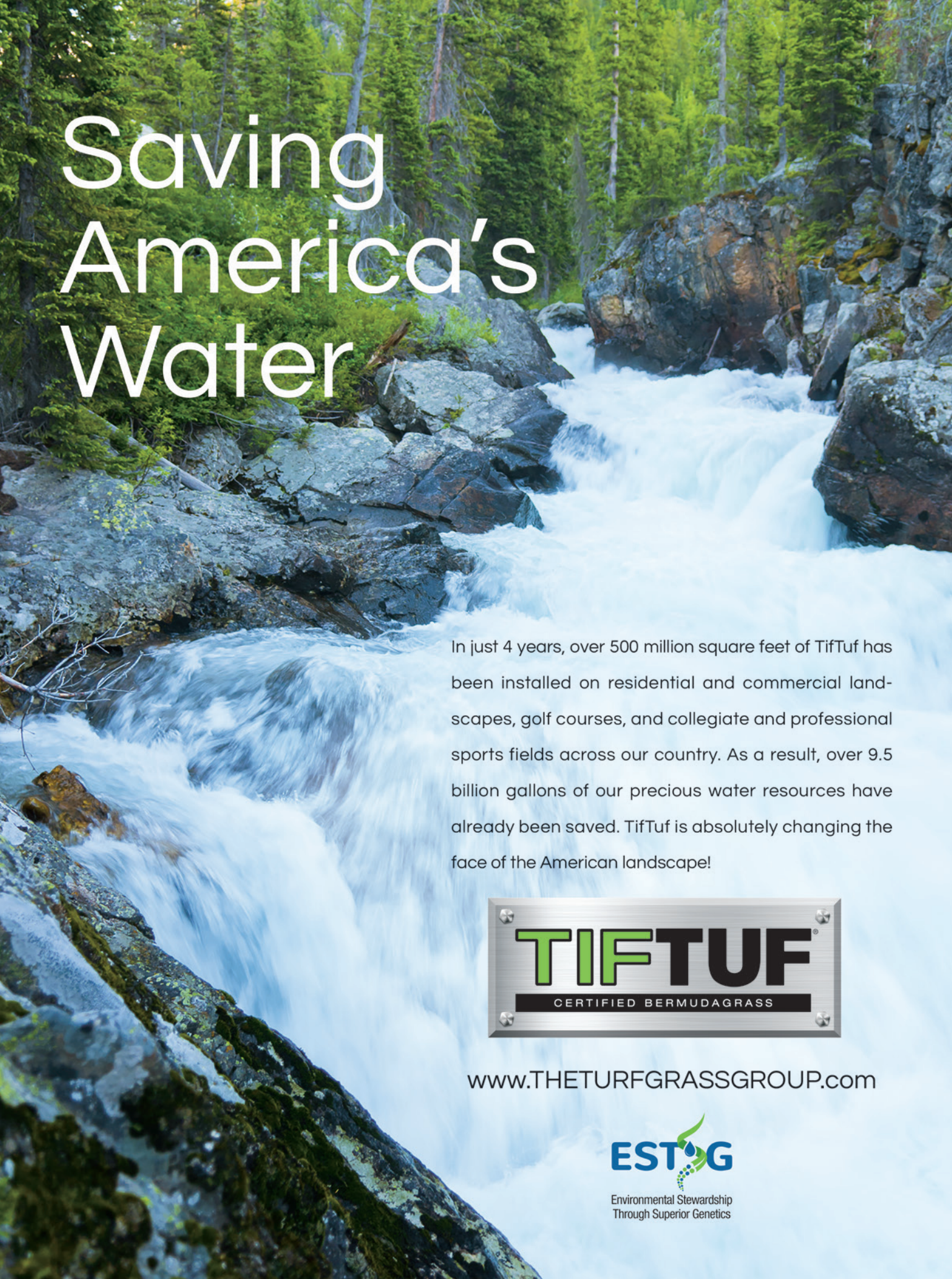
More than 60 groundskeepers from 50 Minor League Baseball (MiLB) Professional Development License (PDL) teams participated in the fifth edition of the Groundskeeper's Symposium, January 20-21, in Savannah, Ga.

Tagged onto the end of the Sports Field Management Association (SFMA) Conference and Exhibition, the symposium has become the annual educational and networking opportunity for the men and women who work year-round to provide first-class playing conditions for athletes competing in AAA, AA, and A levels of Major League Baseball's (MLB) player development affiliated leagues.

In addition to sharing information on professional development, hiring and retention, non-baseball event strategies, and tricks of the trade, this year's session included a virtual meeting with representatives of minor league baseball operations from the MLB Commissioner's Office in New York. Further clarification and expectations of how new PDL requirements have and will impact minor league fields was outlined, as well as looking at some of the new rule changes that will impact how fields are set up for 2022. The larger bases used in the Triple A leagues in 2021 will now be used at all levels of affiliated professional baseball.

Event sponsors DuraEdge, 4Most Sports, Beacon Athletics, Aer-Flo, and Hunter Industries, whose products are utilized at all levels of the major and minor leagues, help offset costs and gave participants the chance to gather for the first time since 2020 (last year's MiLB Symposium was cancelled due to COVID-19).

The symposium agenda, educational topics, and other content are collaborated by a leadership group consisting of Matt Parrott (Charlotte Knights), Brian Soukup (Salt Lake Bees), Wes Ganobcik (Columbus Clippers), Joey Stevenson (Indianapolis Indians), Kyle Calhoon (Hartford Yard Goats), and Keith Winter (Fort Wayne TinCaps).



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- Hibner Soccer and Tennis Complex, Jared Hertzel
- Oak Grove Park, Jason Beavon
- Iowa City Soccer Complex, Colin Stuhr
- City Park, Colin Stuhr
- Mercer Park, Colin Stuhr

SAFE awards two research grants

The Foundation for Safer Athletic Fields for Everyone (SAFE), SFMA's charity, awarded two $15,000 grants to universities to conduct research that will provide safer field surfaces for athletes.

The University of Florida and the University of Tennessee are collaborating on a joint study to evaluate the playability and lower leg forces during the football season. Texas A&M University will research the impact of turfgrass species, soil moisture and mowing height on athlete performance and perceptions. Both studies will commence during 2022 and the results will be published in *SportsField Management* magazine. The grant was made possible by a donation to SAFE from the North Carolina SFMA.

Scholarships and grants

The following scholarships and grants were announced during the SFMA Awards Banquet

- Leo Goertz Membership Grant Awardee – Gregory Hatcher, City County Athletic Complex, Warsaw, Ind.
- Gary Vanden Berg, CSFM, Internship Grant – Adam Webb, Virginia Tech University
- Dorian Dailey Legacy Scholarships – Austin Dungey, SUNY at Albany; and Jackson Floyd, University of North Alabama
- Dr. James Watson Undergraduate Scholarships – Julianne Kessler, Virginia Tech; and William Stipanovich, Iowa State University
- Dr. Fred Grau Scholarship – Brian Tobin, Penn State University
- SAFE Graduate Scholarships – Conlan Burbrink, Texas A&M University; and Tyler Carr, University of Tennessee
- SAFE Undergraduate Scholarships – Gunnar Kale, Morningside University; and Nathaniel Moore, Penn State University. **SFM**

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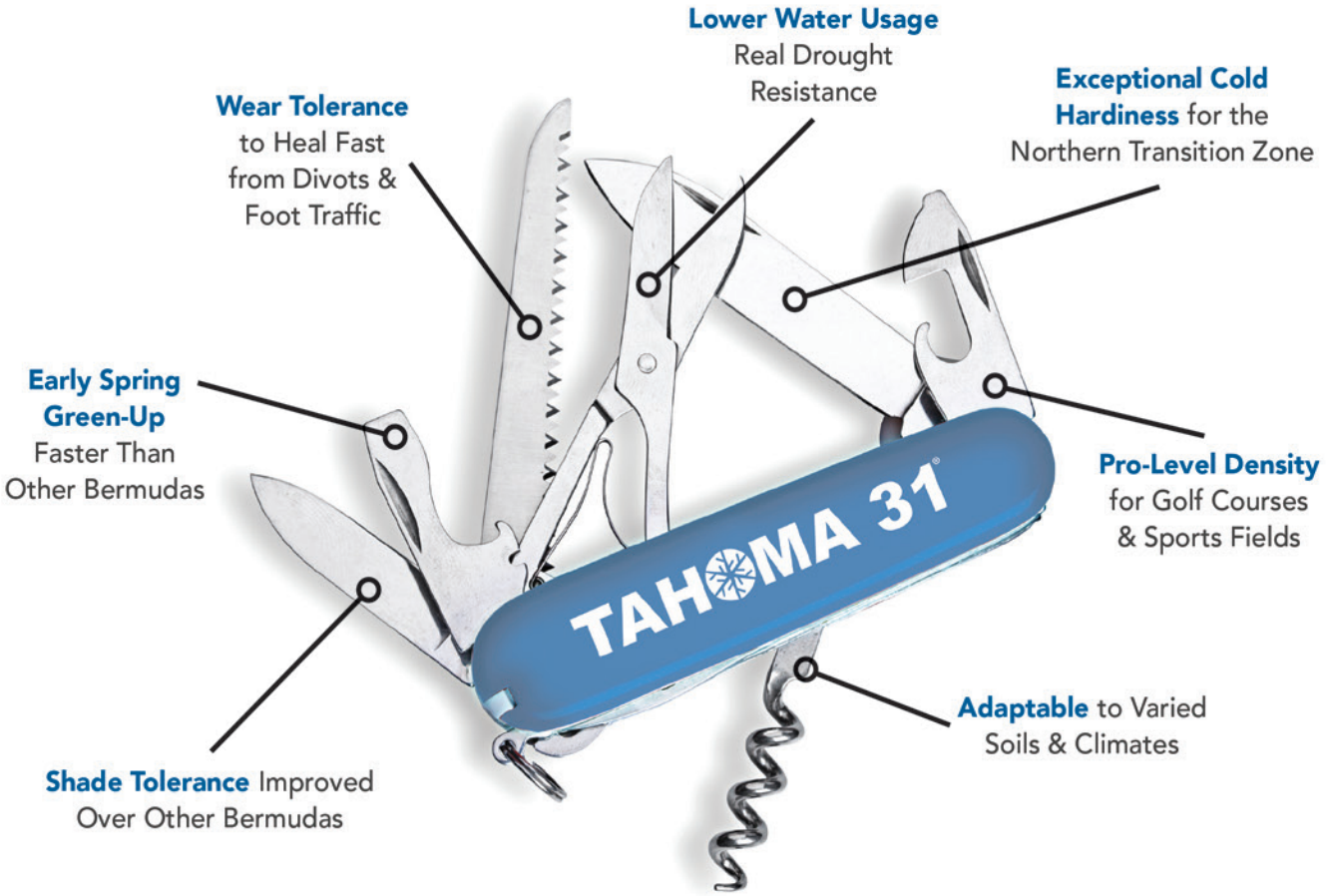

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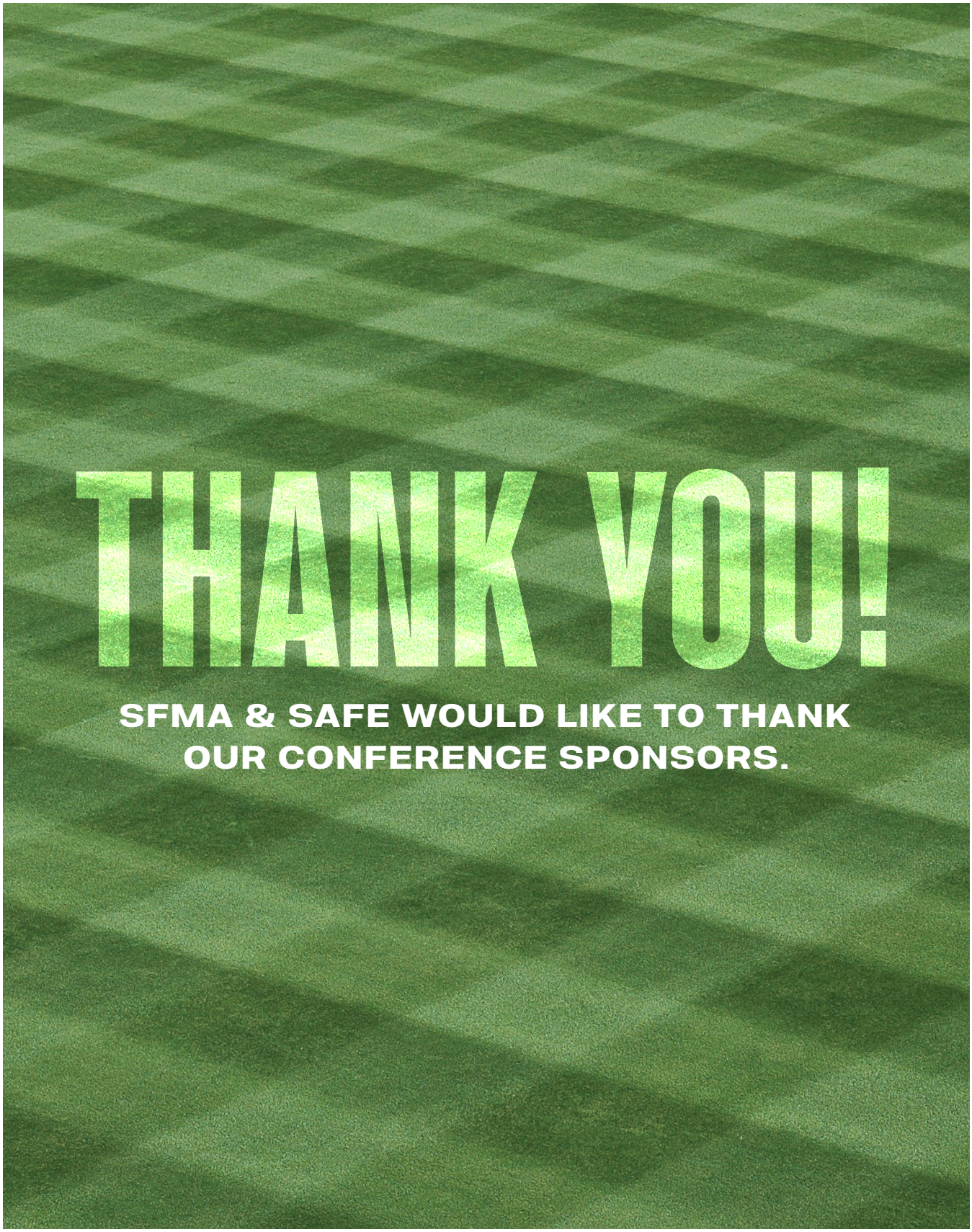
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ANSWER

From page 17

These depressions are actually ruts from a very large and heavy scissor lift that was on site five days before the season opener to inspect the stadium lights and scoreboard. The contractor was instructed by the school facilities department to not drive on the crumb rubber latex track and to drive across the field to get from one bank of lights to another. Luckily, the operator, once he saw the damage, did not drive on the field anymore. The crew was fortunate enough that their sod cutter was the same width as the depressions left from the tires. They set the sod cutter as deep as it could go to cut out the ruts. They then replaced the impacted areas of the playing surface with sod cut from behind the end zone, as these areas of the field are constructed and maintained the same as the playing surface as a sod reserve area. After the repair, the game field was painted and ready for the home opener, and the athletic director was impressed that they were able to pull this off without sacrificing safety and playability.

Photo submitted by Rick Perruzzi, CSFM, CPRP, recreation manager of outdoor athletic facilities at South Portland Department of Parks, Recreation & Waterfront in South Portland, Maine.

John Mascaro is president of Turf-Tec International

If you would like to submit a photograph for John Mascaro's Photo Quiz, please email to john@ turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted will become property of *SportsField Management* and the Sports Field Management Association.

On the Surface

Identification and management of surface active insects

By John C. Fech and Jonathan Larson, Ph.D.

Insects that cause damage to turfgrass are generally categorized as surface active (leafzone) or subsurface active (rootzone). If you have to deal with one group or the other, the surface feeders would be the lesser of two evils. Surface active bugs tend to not cause long-term, permanent damage to turf – they don't feed on the rhizomes, roots or crowns of the plant. Sure, they can make the blades look rough, and even significantly thin the stand, but if the turf is in otherwise good health, more times than not, it will recover. Let's dig deeper (but not too deep) to see when they pose a greater or lesser threat.

Scouting

Regardless of the specific habits and life cycle of a surface active insect, or its potential to cause serious harm, management begins with a dedicated, regular, "every week whether you feel like it or not" inspection program.

In most all professions and workplaces, there are workers who go about their various jobs without much thought as to the rest of operation. If you think about your last visit to a big box store, it's likely that you've encountered these sorts of folks – possibly even overhearing utterances such as, "Oh, that's not my area; I only work in aisles 19 and 20." In the sports field business, managers and technicians don't have the luxury to operate this way. Regardless of which aspect of field maintenance they've been assigned to, it's important to have an active role in pest management, even if it's only an awareness of the most common problems and being on the lookout for current developments.

The key action phrase in this regard is "Look, Look, Look." This manifests itself in two ways. First, as a bird's eye perspective when a worker moves from job to job on a given field. They should be looking left and right, as well as straight ahead for signs and symptoms of pests. If copious amounts of ant mounds are spotted or numerous caterpillars are crawling about, this bears further inspection of these "signs." If brown, burnt or otherwise different-appearing turf is present, these symptoms should be noted, described and documented with further close-up inspections to follow.

Those close-up inspections are the second form of scouting. Using either notes and maps from the previous year/season or seeing obvious symptoms can tell you when to perform such inspections. In this type of scouting – especially considering the possibility of damage from surface active insects – it's important to look closely at the leaves and at the base of the plants for any sign of a bug.

When scouting, remember to get as up close and personal with the plant as possible. It's important to keep in mind that it's not always easy; some critters hide in the thatch, out of view, but are active on the surface. Turf inspections are not done from the UTV or golf cart; it's an on-your-hands-and-knees activity.

If poking around and looking closely at the leaves and stems doesn't reveal the presence of any bugs, it doesn't mean that they're not there. They just might need a little encouragement to show themselves, which involves a step-by-step process of low mowing, applying a detection mixture and waiting 10 minutes. Two tablespoons of lemon-scented dish soap in 1 gallon of water applied from a watering can over a square yard of turf will irritate likely suspects and cause them to move out of the thatch and come to the surface where they can be observed and identified.

Chinch bugs

Nationally, the chinch bug group is made up of four possible pests; the common chinch bug, the western chinch bug, the hairy chinch bug and the southern chinch bug. While there are certain key indicators to distinguish one from the other, there are lots of similarities as well. Adults are 1/5 to 1/6 inch long with white and black wings overlapped over their backs. The wings usually cover the tip of the abdomen, with some having shorter or longer wings. They lay eggs over a period of time, with egg hatch varying from 15 to 25 days depending on the temperature and species of chinch bug. Hatching bugs, called nymphs, are tiny and red with a white band across their body, without

*All photos courtesy of Jim Kalisch, University of Nebraska-Lincoln

Southern chinch bugs

wings. There are usually five immature stages before the winged adults emerge. Depending on the species and the location of the infestation, there can be between two and 10 generations per year. It is common for the generations to overlap each other.

Chinch bugs damage turf in the adult and nymph stages by injecting salivary fluids into plants as they suck sap from them. It's common for many bugs to mass together on turf blades and also to hide in the thatch layer of the turf. Their feeding method produces scattered patches of damaged turf that appear to have been sucked dry.

If you have scouted and determined you have a chinch bug problem, there are multiple avenues of control to consider. Chemically, pyrethroid insecticides have often been used curatively against these sucking pests. Bifenthrin, cyfluthrin, deltamethrin, lambda-cyhalothrin, permethrin, and zeta-cypermethrin all are labelled for use against chinch bugs. Neonicotinoid and combination neonicotinoid and pyrethroid products can help prevent damage from occurring if applied according to the label directions.

Culturally, managers can also choose to plant chinch-bug-resistant cultivars or choose species that local chinch bugs don't prefer. Biological control does naturally occur, with insects like big eyed bugs attaching chinch bugs and fungi like Beauveria bassiana infecting them.

Aphids

Aphids, also called greenbugs, are commonly seen on turf after having infested grain crops and moved on in search of food once the crops have been harvested. Adults appear as oval to elongated with two small structures called cornicles

Aphids (or greenbugs)

at the rear end of their abdomen. Aphids are commonly colored black, green, yellow and brown. Adult females give birth to live young during the grain growing season or summer months. As with chinch bugs, generations are often produced and overlap, especially in the southeast.

Aphids use piercing sucking mouthparts to extract cell sap and dehydrate turf plants, rendering them brown and dried out. Looking for the presence of aphids involves inspecting unaffected plants near the edges of their damage.

Greenbugs are often kept in check by natural enemies such as predaceous lady beetles or parasitoid wasps. If a thorough inspection of the leaf blades shows you have a serious enough issue for treatment, you can choose between organic or synthetic products. Products like Botanigard, which contain Beauveria bassiana, or other organics, such as insecticidal soap, can suppress aphid populations. Liquid applications of pyrethroid insecticides such as bifenthrin, cyfluthrin, etc., will also manage greenbugs. Combination products that have these pyrethroids mixed with systemic neonicotinoids can help with aphids and also manage other pests in the turf. Finally, it should be noted that you should not mow or irrigate for at least 24 hours after treatment for these to be effective against these particular surface pests.

Armyworms

The armyworm complex is made up of the true armyworm, the fall armyworm, beet armyworm, and yellow-striped armyworm. 2021 featured a large outbreak of the fall armyworm across much of the United States, so you might be most familiar with it. The adult of the true armyworm is a night-flying moth, colored a nondescript tan to greyish brown, with a tiny white dot in the center of each forewing. The female deposits her eggs in rows or groups on the leaves of grasses and then rolls the blade around them. When fully grown, the larvae are 1-1/2 inches long with two orange stripes on a mostly brown to black body. In the north, two generations per year are common, whereas three are often seen in the south.

The fall armyworm feeds on a variety of agricultural crops, as well as turfgrass. Eggs are laid on grasses in large masses of 100 or more and covered with fuzz from the adult female. Newly hatched larvae are white with black heads, becoming darker as they feed and grow. The fall armyworm is one of the most destructive pests of bermudagrass, with larvae feeding on the lower surfaces of leaves. Larger larvae often eat entire leaves, leaving only the base of the stem. At this point in their maturity, noting the dull black color, several stripes on the body and an inverted "Y" on the front of the head helps to identify fall armyworms. Infested turf takes on a ragged, uneven and sometimes bare appearance as large numbers of worms seemingly move across a section of turf in mere days – hence the name "armyworms."

As with most caterpillar pests, there are a variety of products that can manage the hungry, hungry members of the armyworm complex. Managers who treat preventively for grubs using chlorantraniliprole will also see that they have prevented damage from caterpillars like armyworms. This is not necessarily true of the neonicotinoids we use for preventing grub problems, so if you rotate to that class for a year be on the lookout for symptoms of caterpillars. Organically, Bt (*Bacillus thuringiensis*) and Spinosad can control small armyworms if you catch the infestation early enough. If you have already incurred some damage and are looking to stave off more, pyrethroids like bifenthrin, permethrin, and lamda-cyhalothrin can control up to 75 percent or so of larger larvae. Liquid and granular products can work against armyworms due to their proclivity to hide in the thatch layer during the day.

Fall armyworm mature larva

Cutworms

Black, bronze and variegated cutworms are pests of turf, each with descriptions matching their respective names. Black cutworms are dark grey to black in color, without much else in the way of distinctive markings. Bronze cutworms are dark brown to black with three yellow stripes on the upper side of the body and a bit paler on the underside. The variegated cutworm is grey to brown with an orange lateral stripe and a series of darker lateral markings. A row of yellow or white dots run down the middle of the back. Fully grown cutworm

Black cutworm

larvae of each species reach 1-1/4 to 1-1/2 inch in length, and have a dark-brown to grey head.

As the name implies, cutworms feed on the lower parts of the stem, clipping them off and causing them to fall over and dehydrate.

Management of cutworms is similar to that of armyworms. One physical management method for this group would be to remove clippings from the field and dump them far from those areas. The clippings will contain numerous eggs of these species, and removing them can cut the cutworm problem out before it begins. Aside from that, chlorantraniliprole would again offer extended protection from both grubs and these caterpillars. Systemic clothianidin would also help with both of those issues. To treat cutworms alone, pyrethroids like bifenthrin, deltamethrin, and lambda cyhalothrin would all be options. Organically, Spinosad can help minimize cutworm issues.

Sod webworms

Sod webworm larvae are grey to tan with small dark spots on the body, and brown heads. When fully grown, they reach 3/4 of an inch to 1 inch in length. They spend the winter as partially grown larvae in the thatch and resume mobility in mid-spring. After a month or so, they emerge as adults, appearing as 3/4-inch tan moths that randomly scatter their eggs into the turf, flying low to the ground in a zig-zag pattern. The eggs take a week to two to hatch and begin feeding on grass stems. In the north, two generations are customary; in the south, the norm is three.

Like cutworms and armyworms, sod webworm moths do not injure turf. Larvae feed in the evening hours, chewing on stems near the soil surface, and then hide in burrows in the thatch in daytime. Small ragged brown spots are the first signs of damage in the turf. Upon close inspection, the stems will have a grazed or scalped appearance. Over time, the spots enlarge and merge together. The most damage occurs in late summer when sports fields are under the greatest stress.

Chlorantraniliprole will provide management of sod webworms. Another biorational option would be Spinosad. As with the aforementioned caterpillar pests, pyrethroid products tend to be a standby control option for spot treatment or outbreaks of these insects. Bifenthrin, cyfluthrin, lambda cyhalothrin and others can suppress sod webworms.

Surface active insect look-alikes

Several causal agents can injure turf and easily be mistaken for surface active insect damage. For this reason, the aforementioned scouting procedures are very important; they help eliminate various insects as responsible influences for the turf decline.

Lawn diseases such as Bipolaris leaf spot, stripe smut, brown patch, anthracnose and summer patch can produce similar symptoms to cutworms, aphids, chinch bugs, armyworms and sod webworms. The key to knowing the difference is to become very familiar with the telltale signs of each, and honing in on them to verify which is responsible.

Severe billbug infestation, which is both a surface and subsurface active insect – causing damage in both above ground stems and throughout the root system – also adds confusion to determining which insect or combination of insects is causing damage to the turf. Hollowed-out stems that break off at the soil surface and shredded roots are typical of billbug damage.

Likewise, heat and/or drought stress will act in concert with the previously mentioned insect species. A small infestation will appear to be much more extensive when the turf is also stressed from inadequate soil moisture or extended periods of high temperature.

Regular scouting, sound fertility and irrigation programs and judicious use of pest control agents all play a part in keeping sports fields healthy and functional. **SFM**

John C. Fech is a horticulturist with the University of Nebraska-Lincoln and certified arborist with the International Society of Arboriculture. The author of two books and more than 400 popular and trade journal articles, he focuses his time on teaching effective landscape maintenance techniques, water conservation, diagnosing turf and ornamental problems, and encouraging effective bilingual communication in the green industry.

Jonathan Larson, Ph.D., is an Extension professor for the University of Kentucky who provides insect expertise for people dealing with issues in urban landscapes, turfgrasses, nursery crops, greenhouses, and households. He teaches across a variety of platforms using social media, videos, and traditional Extension publications. He is one of the co-hosts of Arthro-Pod, an entomology podcast.


Photo courtesy of BSC Group Inc.

YEAR-ROUND CARE

Thinking beyond the preseason for best results from baseball fields

By Mary Helen Sprecher

Before players take the field. Before the first pitch is thrown. Before the crack of a bat (or the swish of a strike) sends spectators into a frenzy and declares the season open – before all that happens, comes the golden window of opportunity for making baseball facilities the best they can be.

You already know facilities can have surfaces that are natural or manmade; however, one essential point is that both require regular upkeep, and that starts with walking the fields regularly to look for problem areas. On natural fields, keep an eye out for rutted, worn or wet areas, signs of disease or pest infestation, as well as any areas where weeds are encroaching. On synthetic fields, some symptoms to look for low or wet spots, as well as issues of wear or damage to the turf.

And care shouldn't just come during the playing season, or even the preseason. According to Lee Narozanick, CFB, CTB, of American Athletic Track and Turf, a program of maintenance should go on throughout the year – with the possible exception of times when fields are snow-covered and can't be used. (In which case, it's a suitable time to make sure all maintenance equipment is in good working order, and to make repairs as necessary.)

"In the offseason, care should still be given to the fields," said Narozanick. "This way, the work is minimized in the spring to ready the field for play, rather than having a heavy maintenance load."

"How often you do regular maintenance depends mainly on how often a field is used," said Todd Smith, Ph.D., PE, LEED AP of R&R Engineers-Surveyors, Inc. "It's pretty common to have the baseball team arrive early by an hour or two or stay late" [thus adding time the field is in use, beyond actual game hours].

Work that should be undertaken includes raking of the entire area, rebuilding the pitcher's mound, rebuilding the batter's box, and chalking the batter's box along with foul lines, he said. Smith cautions against falling prey to a few common mistakes in maintenance.

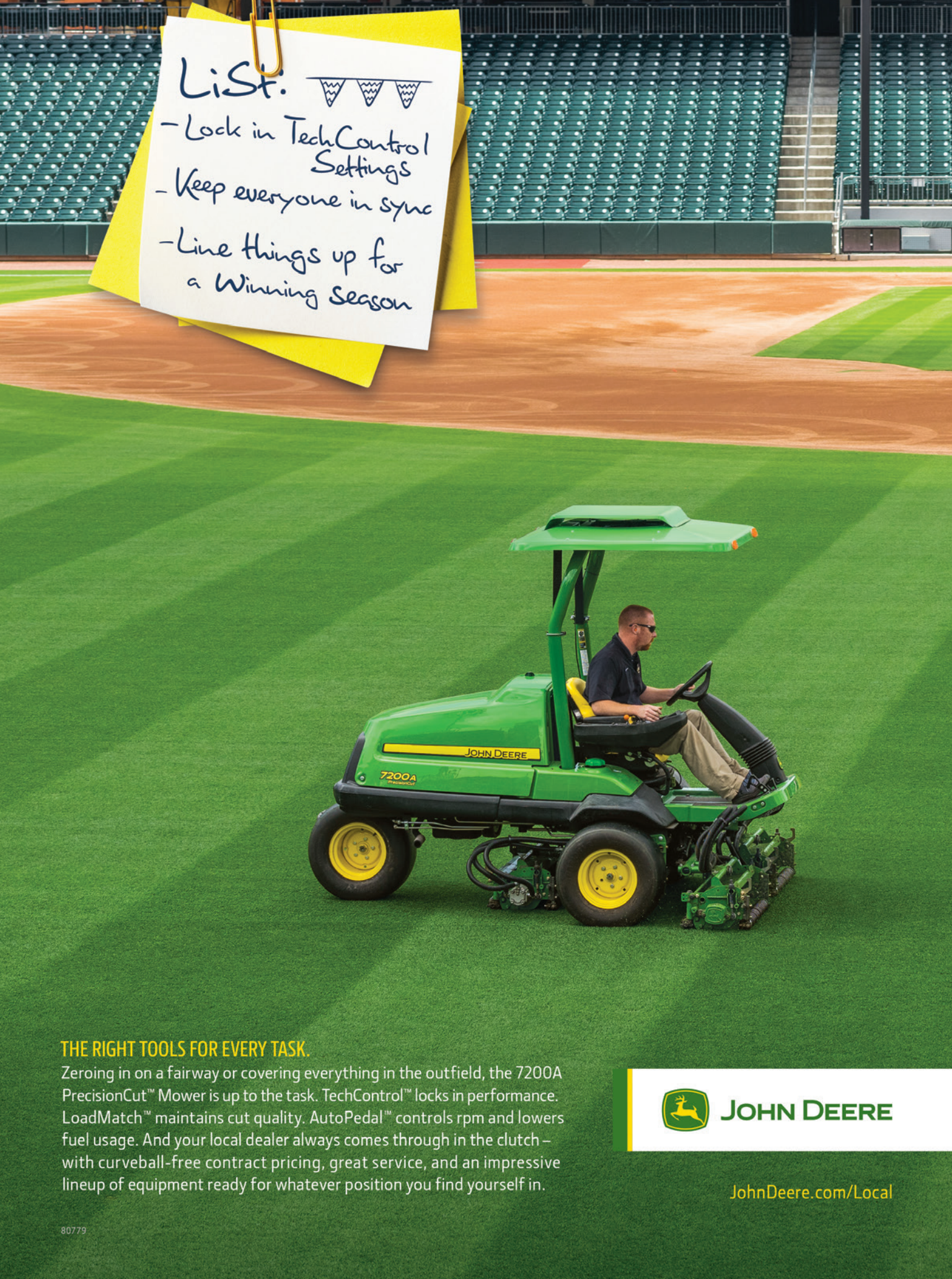

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Photo courtesy of Sportworks Design

"For the infields, the main mistake is not doing a little maintenance each day or each time the field is used. The second-most often made mistake, in my experience, is always dragging from the center in a spiral to the outside to avoid equipment tracks if they end in the center. This is the number-one cause of what is called the "infield lip," which is when the infield mix is deposited into the first two to three feet of the outfield edge. This raises the rootzone and the grass grows through it. Then it gets raised again, the grass goes through it again – and suddenly the infield lip causes a ball rolling to the outfield to hop up into a fielder's chin instead of rolling true."


Photo courtesy of Lone Mountain Contracting, Inc.

In terms of common mistakes, he adds, "For me, it's the same two main answers as the Sports Field Management Association (SFMA) has been giving for 20 years. The first big mistake is overwatering. Just because a grass blade turns a bit tan or brown doesn't mean it needs more water. It may need rest, as every living organism does. It may need more phosphorus and potassium fertilizer to help store energy reserves. It may be out of its temperature range. In the Southwest, for example, people overwater their yards all July and August because their bluegrass turns a bit brown – but it is turning brown because the summers are too hot for bluegrass, and it is going dormant as a result of the temperatures. The second mistake is using too much nitrogen. Again, just because the grass is browning doesn't mean it needs nitrogen; if you add too much, it might look nice and green, but it has lower root strength and no reserves so it can't handle as much use."


Photo courtesy of Stantec Sports Group

If your field is made of synthetic turf, it too should get regular care, commensurate to its use.

"Maintaining the field should match the amount of use the field gets," said Mitchell Truban of Tarkett Sports/Beynon. "If it's a high-use field, the sweeping, grooming and deep cleaning will happen more often than one that is used a couple times a month. The high-use areas (batter's box, pitcher's mound, slide areas, etc.) should be groomed and infill monitored after each use."

Narozanick added that synthetic turf fields should be visually inspected weekly, so as to nip problems in the bud. "Groom it at least every two weeks with a soft-tined tool and keep the turf clean."

Another good baseline for maintenance work is to figure out how many hours the field is in use, and schedule upkeep around that, said Robert Cohen, CSI, CDT, of Robert J. Cohen Co. LLC/Sport Surfaces Distributing, Inc. "Groom the field every 40 hours of use and sweep as needed," he said.

If a high-wear area, such as the pitcher's mound, needs to be replaced on a synthetic field, it will be necessary to take the level

Photo courtesy of Rettler Corp.

of play into consideration, as pitching distances and mound heights vary according to the age of the player.

According to David Moxley of Sportsfield Specialties, it is possible to purchase pitching mound forming systems designed specifically for synthetic turf facilities.

"Look for a product that allows the height of the mound to be tailored to the exact specifications needed for the play you'll be hosting," he said.

Many schools, sports parks and other entities have plans – even if they're still on the proverbial drawing board – for one or more additional fields. In these cases, there's still plenty of decision making involved. For those who would like to become more knowledgeable about their options, the American Sports Builders Association publishes *Sports Fields: A Construction and Maintenance Manual*. The book walks readers through the decision-making process that should precede deciding upon a field surface, as well as its location. It also discusses various types of field surfaces. The book is available in both hard copy and electronic form from the ASBA website, *www.sportsbuilders.org*. **SFM**

Mary Helen Sprecher wrote this article on behalf of the American Sports Builders Association (www.sportsbuilders.org), the national organization for builders, design professionals and suppliers of materials for sports fields, running tracks, tennis courts and indoor and outdoor courts and recreational facilities.

SPREADERS AND SPRAYERS

ECOLAWN TOPDRESSERS

With its compact size and the lightest footprint on the market, the demand coming from sports field managers is growing very fast for Ecolawn. With a desire of continually improving its products, Ecolawn is working closely with, and listening to, its users. Wanting to increase the quality of all types of applications, Ecolawn has made a huge difference in spreading materiel with a minimum of ground compaction. Winning features include its simple design for maintenance, its compact size for tight and delicate areas, and its capacity for spreading all kinds of material with ease. Contact Ecolawn to find out which model suits your needs.

FERRIS MOWERS ROVER XC FS1200

Ferris updated its Rover XC FS1200 ride-on spreader with a Vanguard 160 engine, making it ideal for those who want a compact spreader but don't want to sacrifice power and granular capacity. The Rover XC FS1200 provides excellent handling, even on sloped turf, and has a 100-percent stainless-steel frame and coated transmission that resist the corrosive effects of granular chemicals. Its compact size allows for maneuverability and easy access through residential gates and onto smaller trailers. Still, its hopper has 200 pounds of granular capacity allowing users to efficiently cover more area. Simple, ergonomically placed controls allow for easy operation, and the Rover will reach speeds of up to 5 miles per hour.

LESCO RIDE-ON SPREADERS AND SPRAYERS

SiteOne Landscape Supply launched its new, exclusive LESCO ride-on spreaders and sprayers, including the LESCO 100, 200, 300 and 600 applicator models, which feature 100-percent stainless-steel frames and coated Peerless transaxle to resist corrosive granular chemicals for added life. With a low center of gravity, the LESCO Model 100 is ideal for projects that do not require liquid application. The Model 200 releases both dry and liquid material, and features a dual setting spray system with 3- and 10-foot settings for multiple applications. With zero-turn drive and a variable spray system, the Model 300 delivers coverage widths of 2-, 4-, 6- or 8-feet for use in several applications. Dual liquid spray tanks also provide a total capacity of 24 gallons for up to 2.2 acres of coverage. As the largest model in the lineup, the Model 600 offers 12-foot spray coverage, plus a pivoting front axle with a low center of gravity for excellent performance on sloping terrain.

RYAN LAWNAIRE ZTS WITH SPYKER SPREADER ATTACHMENT

In addition to efficient aeration across large sports field properties, the Ryan Lawnaire ZTS features an exclusive commercial electric spreader — manufactured by Spyker — to help users achieve a new level of productivity when aerating and overseeding with the same machine. The spreader hopper holds up to 120 pounds of material, so operators can complete large tasks with fewer refills, getting the job done faster. Also, variable speed control comes standard, mounted within arm's reach of the operator platform, allowing for easy control of a spread swath of up to 16 feet. The mounting kit is custom designed to fit on the Ryan Lawnaire ZTS for simple and accurate installation. No cutting, drilling or fabrication is necessary to secure the attachment.

SCAG TURF STORM

Built Scag Tough, the Turf Storm stand-on spreader/sprayer is a must-have tool for the serious landscape chemical applicator, and is a natural fit for large commercial properties. With right-sized liquid (60 total gallons) and dry/granular (220 lbs.) capacities, the Turf Storm will help operators get more done per day for maximum productivity and profitability. An 8-foot-wide fold-away spray boom with five nozzles delivers spraying widths of 2, 6, 8 or 10 feet. Dry/granular materials can be spread up to 25 feet wide thanks to a high-torque electric spreader motor. A powerful and efficient 21-hp. Vanguard engine delivers ample power, along with exceptional efficiency and dependable performance. The machine's 50-amp charging system ensures dependable spreader operation and battery life. The Scag Turf Storm features a 2-year commercial warranty.

STEEL GREEN SPREADER/ SPRAYER MACHINES

Reduce application time by half with one machine that spreads and sprays simultaneously. Steel Green Manufacturing's stand-on, zero-turn spreader/sprayer machines are an efficient solution for busy sports field managers. Steel Green machines feature a decked-out 23.5-hp. engine. The SG52 zero-turn spreader/sprayer is Steel Green's most productive model. With its dual 30-gallon spray tanks, Spyker 220-pound hydraulic-driven granular system, and high-density poly fertilizer trays, the SG52 holds up to 60 gallons of liquid and 320 pounds of granular product. It's also compatible with the SG Snowplow and SG Rake attachments. Steel Green machines are fully customizable with options and accessories, including a pressure control system, 12-foot boom, foam marker, and LED light kit. For fertilizer and pesticide applications on large sports fields or complexes, the SG52 is a game changer.

TURFCO T-5000 RIDE-ON SPREADER/SPRAYER

The Turfco T-5000 never misses a beat, even at maximum load capacity of 325 pounds of granular material and 60 gallons of solution, thanks to its powerful 22-hp. engine and unique steering-wheel-based drive system. Glide across the turf at speeds up to 7 mph – and cover up to 290,000 sq. ft. per hour. The T-5000's intuitive operating controls make it easy for operators to get up and running quickly, and the dynamic drive system gives it ample holding power and torque to handle hilly and uneven turf without faltering. The T-5000 is equipped for two-way duty with its matching spread/spray capacity allowing operators simultaneously fertilize and spray for weed control – doubling their productivity. The hydraulically driven spreader allows for 25-foot-wide spread widths; maximum spray width is an industry-best 13 feet. **SFM**

The following are some industry Tweets from the past month:

@mronTurf

Covers down. Lights on. Let's grow some grass!

FEBRUARY 8

@Twillhog75

Nothing like trying to grow grass in KC at the end of January. I wasn't expecting a full cart load.

JANUARY 27

@rtdemayturf

Fantastic behind the scenes visit of Historic Grayson Stadium in Savannah. Ruth, Aaron, Robinson, Gehrig, and Mantle have played in this ballpark. Cool stop for tomorrow's @FieldExperts Seminar on Wheels! #SFMA2022 #STMA2022

JANUARY 19

@CrewGroundsCrew

Gameday Columbus, the world is watching Flag of United States @USMNT #GroundsCrew96 #USMNT #WCQ #FreshCut #FreshPaint

JANUARY 27

@ChadMartin4114

This turf art work gets my engine revved up. Great work Scott Fabulich! #turffuel @TargetSpecProd @TurfFuel

JANUARY 27

SFMA WHERE THE GAME BEGINS

@FieldExperts

A new vision for the future.

JANUARY 18

Biral BTD-200 lightning warning system

The BTD-200 lightning warning system is a complete detection and warning system developed from the Biral range of professional aviation-grade lightning detection systems. Its proven detection technology reliably detects the presence of all forms of lightning out to a range of 22 miles from the sensor. Designed to be quickly and easily installed, it comes complete with a universal mains voltage power supply and the essential PC server application Lightning Works for monitoring, warning and data logging of approaching thunderstorms.

The BTD-200 makes quasi-electrostatic measurements to avoid the problems of false alarms and mechanical failures associated with the detection of lightning using radio wave and field-mill based sensors. Most importantly, it is able to issue warning of potential overhead lightning before the first strike. Such early warning is not possible using radio-based detection.

Protecting people and equipment from the dangers of a lightning strike is all the more important in areas where large numbers of people are outdoors across a wide area enjoying a leisure activity.

The advanced detection principle of the BTD-200 enables it to monitor the strength of the local electric field and the presence of charged precipitation, both of which are strong indicators of lightning risk. This allows the BTD-200 to provide warnings of the risk of an overhead strike even before any lightning has been produced. This advanced warning can be up to 20 minutes before the lightning begins.

The BTD-200 lightning warning system is a modular system that is designed to operate out-of-the-box, but is also expandable as requirements grow or change. The essential system comprises of a lightning detector which is placed outside, while a PC located indoors runs the supplied Lightning Works software. The system includes a universal mains power supply and (optionally) the cabling to connect to the power and the host PC. The BTD-200 can be connected directly to an appropriately sized warning sounder if required.

Stihl acquires 23% of Danish robotics company, TinyMobileRobots

German industrial group Stihl announced a significant investment in Danish robotics company TinyMobileRobots. Stihl's robotic lawn mowers share a strong technical kinship with the advanced and fully autonomous line marking robots produced by TinyMobileRobots, which are intended for use in sports fields, road construction, agriculture and more.

Stihl Group has been closely following TinyMobileRobots' rapid international growth in recent years. Recognizing the opportunity for further expansion, the corporate venture arm of the Stihl Group, Stihl Digital, acquired 23.8 percent of TinyMobileRobots, buying out the company's former state-funded investment, managed by venture capital firm Borean Innovation, which was commissioned by the Danish Government as part of an environmental innovation program. Private investor Anders Fauerskov, former co-owner of TC Group, will continue to own part of the company and remains a significant capital partner within the new circle of owners.

"We have been looking for a strong partner capable of securing further growth and development – and partnering with Stihl is an absolute dream scenario," said Jens Peder Kristensen, founder and CEO of TinyMobileRobots. "Together, we share a pool of knowledge, experience and skills, which will create great value for both companies. Right from the outset, we will also benefit greatly from Stihl's worldwide network of dealers."

TinyMobileRobots' solutions can be found on the grounds management staff of thousands of fields for sports teams. Its clients include Yale University, FC Dallas, The University of Michigan, Florida State University and Manchester United.

TinyMobileRobots are ideal for every sports league playing field, with more than 50 design configurations managed on a smartphone app. With the robots, an entire football field can be completed in less than two hours, and a soccer field in just 20 minutes. **SFM**

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Sports Turf Managers Association of Arizona: www.azstma.org

Colorado Sports Turf Managers Association: www.cstma.org

Florida #1 Chapter (South): 305-235-5101 (Bruce Bates) or Tom Curran, CTomSell@aol.com

Florida #2 Chapter (North): 850-580-4026, John Mascaro, john@turf-tec.com

Florida #3 Chapter (Central): 407-518-2347, Dale Croft, dale.croft@ocps.net

Gateway Chapter Sports Turf Managers Association: www.gatewaystma.org

Georgia Sports Turf Managers Association: www.gstma.org

Greater L.A. Basin Chapter of the Sports Turf Managers Association: www.stmalabasin.com

Illinois Chapter STMA: www.ILSTMA.org

Intermountain Chapter of the Sports Turf Managers Association: http://imstma.blogspot.com

Indiana: Contact Clayton Dame, Claytondame@hotmail.com or Brian Bornino, bornino@purdue.edu or Contact Joey Stevenson, jstevenson@indyindians.com

Iowa Sports Turf Managers Association: www.iowaturfgrass.org

Keystone Athletic Field Managers Org. (KAFMO/STMA): www.kafmo.org

Mid-Atlantic STMA: www.mastma.org

Michigan Sports Turf Managers Association (MiSTMA): www.mistma.org

Minnesota Park and Sports Turf Managers Association: www.mpstma.org

MO-KAN Sports Turf Managers Association: www.mokanstma.com

New England STMA (NESTMA): www.nestma.org

Sports Field Managers Association of New Jersey: www.sfmanj.org

North Carolina Chapter of STMA: www.ncsportsturf.org

Northern California STMA: www.norcalstma.org

Ohio Sports Turf Managers Association (OSTMA): www.ostma.org

Oklahoma Chapter STMA: 405-744-5729; Contact: Dr. Justin Moss okstma@gmail.com

Oregon STMA Chapter: www.oregonsportsturfmanagers.org oregonstma@gmail.com

Ozarks STMA: www.ozarksstma.org

Pacific Northwest Sports Turf Managers Association: www.pnwstma.org

Southern California Chapter: www.socalstma.com

South Carolina Chapter of STMA: www.scstma.org

Tennessee Valley Sports Turf Managers Association (TVSTMA): www.tvstma.com

Texas Sports Turf Managers Association: www.txstma.org

Virginia Sports Turf Managers Association: www.vstma.org

Wisconsin Sports Turf Managers Association: www.wstma.org

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Spring Transition

Q: Anticipating more wear this winter than normal, we overseeded our bermudagrass fields with perennial ryegrass back in the fall. The fields held up and are in good shape going into our spring season. My question is spring transition. What are your suggested practices so our bermudagrass returns healthy?

A: The main objective in spring transition is a gradual and smooth transition from overseeded grasses back to bermudagrass. While it is called spring transition, the changeover may not start until summer if the area has cool spring temperatures. Dormant bermudagrass shows signs of green-up when soil temperatures reach about 58 degrees. Many of the perennial ryegrasses used for overseeding are heat tolerant and may successfully compete with bermudagrass through spring.

It is important that management of the turfgrasses begin to favor the bermudagrass while increasing the stress on the ryegrass. This is less critical in the deep south since the average daytime temperatures tend to surge in the spring, hastening the stress on overseed ryegrass. However, for managers in the cooler transition zone, this will be paramount to getting back a healthy stand of bermudagrass. The three main means of providing a desirable transition back to bermudagrass are proper timing, gradual reduction in mowing height, and a corresponding increase in nitrogen fertilization.

Research suggests that temperature is the dominant driving factor in natural overseed transition. For that reason, temperatures need to be considered when scheduling management practices. Bermudagrass shoots will begin greening up with daytime air temperatures in the 50s, but bermudagrass will not aggressively grow until the nighttime temperatures are consistently in the mid-60s.

Begin reducing the mowing height several weeks before the expected spring transition period. The goal is to gradually reduce the height until the turfgrass is mown about 50 percent lower than the in-season mowing height of ryegrass by the time night temperatures are in the mid-60s. A lower mowing height reduces shading from the ryegrass on the developing bermudagrass, warms the soils, and inhibits the growth of the overseeded turfgrass. If desired, the mowing height can be raised as the bermudagrass begins to dominate the turfgrass stand.

Maintain low fertilizer application rates from late winter through early spring to reduce overseed ryegrass growth. Liquid iron can be very effective at maintaining desirable green color during this time without excessive growth. When bermudagrass growth is apparent, restore fertilizer applications. At this point, weekly applications of 1/4 pound of soluble nitrogen per 1,000 square feet will help stimulate bermudagrass spread for a more consistent green up.

Cultural practices such as spiking and light vertical mowing can thin the overseed ryegrass and increase soil warming, further encouraging bermudagrass growth. Do not get too aggressive with these practices, as that can damage young bermudagrass shoots and stolons. Aggressive core aeration and dethatching should be scheduled later in the summer when the bermudagrass is more mature and actively growing.

Withholding water in an attempt to encourage the overseeded turfgrass to die from moisture stress is no longer a recommended practice. Bermudagrass initiates new roots in the spring, so withholding water can cause greater damage to the bermudagrass than the deeper-rooted ryegrass. It is better to maintain adequate moisture in the rootzone with deep and infrequent watering in the absence of rainfall.

Selected use of herbicides has proven useful for transitioning turfgrasses. Removal of the overseed grass with herbicides will remove the competitiveness, and therefore allow quicker bermudagrass recovery. This is especially important in the transition zones where winter overseed tends to linger into summer. The most commonly used herbicides are those found in the sulfonylurea family (e.g., metsulfuron, trifloxysulfuron, foramsulfuron and flazasulfuron). The downside to using herbicides is that, once sprayed, there is no turning back; so, do not apply these products until bermudagrass has resumed normal growth. Also, these are low-use rate herbicides, so sprayer calibration and application uniformity are critical to getting even removal of the overseed. **SFM**

Grady Miller, Ph.D.
Professor and Extension Turf Specialist
North Carolina State University

Questions?
Send them to Grady Miller at North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or e-mail grady_miller@ncsu.edu

Or, send your question to Pamela Sherratt at 202 Kottman Hall, 2001 Coffey Road, Columbus, OH 43210 or sherratt.1@osu.edu

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